

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical module comprising:
a housing having a lower casing integrating with a receptacle ~~for mating with an optical connector~~ and a mount, an upper casing ~~being~~ engaged with the lower casing~~[[;]]~~, and a cover for covering the upper casing;

a block mounted on the lower casing, the block having a substrate supporting portion, a substrate pressing portion and a mounting portion;

an optical sub-assembly ~~having leads and~~ mounted on the block, ~~the optical sub-assembly being and~~ optically coupled with ~~the~~ an optical connector mated with the receptacle; and

a substrate mounted on the mount of the lower casing and ~~held~~ supported by the block, the substrate being electrically connected to ~~the leads of~~ the optical sub-assembly,

wherein the block ~~holds~~ supports the optical sub-assembly in the mounting portion and the substrate, and defines by sandwiching between the substrate supporting portion and the substrate pressing portion to define relative positions of ~~the lower casing and the upper casing~~ the block, the optical sub-assembly and the substrate.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The optical module according to claim 3 ~~1~~, wherein the block further includes a center wall and a pair of side walls disposing the center wall therebetween,

the center wall providing the substrate supporting portion and each of the pair of side walls providing the substrate pressing portion.

5. (Previously Presented) The optical module according to claim 14,

wherein the lower casing has a projection on the mount for holding the block between a side face of the projection and the surface of the receptacle such that the surface of the block abuts against the surface of the receptacle.

6. (Currently Amended) The optical module according to claim 14, wherein the block provides a first cutout, the lower casing provides a second cutout, and the upper casing provides first and second protrusions for engaging with the first and second cutouts, respectively such that the surface of the block abuts against the surface of the receptacle.

7. (Currently Amended) The optical module according to claim 6, wherein the block includes ~~a mounting portion for mounting the optical device~~, a center wall[[,]] and a pair of side walls ~~for providing the first cutout~~, the side walls disposing the center wall therebetween providing the first cutout, the mounting portion being disposed between the center wall and one of side wall walls.

8. (Previously Presented) The optical module according to claim 6, wherein the second cutout is formed in a side wall of the lower casing.

9. (Previously Presented) The optical module according to claim 14, wherein the upper casing includes a projection and the block includes a center wall with a cutout,

the projection being in contact with a cross section of the cutout such that the surface of the block abuts against the surface of the receptacle.

10. (Currently Amended) The optical module according to claim 14, further comprising a holder for holding the optical sub-assembly ~~for~~ by surrounding the optical sub-assembly ~~such that the holder holds~~ and pressing the optical sub-assembly ~~with~~ respect to the block.

11. (Currently Amended) The optical module according to claim 1, wherein the block is made of a resin.

Claims 12 and 13. (Cancelled)

14. (Currently Amended) The optical module according to claim 1, wherein the receptacle ~~of the lower casing~~ has a surface with an opening for abutting against a surface of the block with an opening corresponding to the opening provided in the surface of the receptacle, the optical sub-assembly ~~passing~~ being inserted into the opening of the surface of the receptacle and the opening of the block ~~therethrough~~.

15. (Currently Amended) An optical module comprising:
an optical sub-assembly having leads and mounted with an optical device;
a substrate electrically connected to the leads of the optical sub-assembly;
a resin block including a front wall with an opening to ~~pass~~ insert one end of the optical sub-assembly ~~therethrough~~ thereinto, a center wall with a substrate supporting portion and a first cutout, and a pair of side walls disposing the center wall therebetween, each of the side walls providing a substrate pressing portion for pressing the substrate and a second cutout, the substrate supporting portion and the substrate pressing portion ~~holding~~ fixing the substrate by sandwiching the substrate therebetween;

a lower casing ~~having~~ building with a receptacle ~~for~~ and a mount receiving an optical connector holding an optical fiber and ~~a mount for mounting the substrate, the receptacle~~ providing a surface with an opening for ~~passing~~ inserting the one end of the optical sub-assembly ~~therethrough~~ thereinto, the mount mounting the substrate and providing a projection for sandwiching the block with the surface of the receptacle such that the front wall of the block

abuts against the surface of the receptacle, the lower casing providing a third cutout in a side wall thereof; and

an upper casing providing a first protrusion to engage with the first cutout provided in the side wall of the resin block, a second protrusion to engage with the third cutout provided in the side wall of the lower casing, and a third protrusion to engage with the second cutout provided in the center wall of the resin block such that the front wall of the resin block abuts against the surface of the receptacle.

16. (Currently Amended) A method for manufacturing an optical module including an optical sub-assembly, a block, a substrate, a lower casing and an upper casing, the method comprising steps of:

(a) mounting the optical sub-assembly on the block such that a leading end of the optical sub-assembly ~~passes~~ is inserted into an opening provided in a front wall of the block ~~therethrough~~;

(b) securing the substrate to the block such that a substrate supporting portion provided in ~~a center wall of~~ the block and a substrate pressing portion provided in ~~a side wall of~~ the block sandwiches the substrate therebetween;

(c) electrically connecting the substrate with leads of the optical subassembly;

(d) installing the block mounting the optical sub-assembly electrically connected with the substrate ~~into~~ in the lower casing including a receptacle such that the leading end of the optical subassembly ~~passing~~ inserted into the opening of the block enters an opening formed in a surface of the receptacle; and

(e) assembling ~~securing~~ the upper casing with the lower casing such that the front wall of the block abuts against the surface of the receptacle.

17. (New) The optical module according to claims 14,

wherein the block is made of a resin.

18. (New) An optical module comprising:

a housing having a lower casing, an upper casing engaged with the lower casing, and a cover for covering the upper casing, the lower casing integrally including a receptacle and a mount, the receptacle mating with an optical connector;

an optical subassembly optically coupled with the optical connector mated with the receptacle, the optical subassembly having a plurality of leads;

a substrate mounted on the mount of the lower casing and electrically connected to the plurality of leads; and

a block mounted on the lower casing, the block including a substrate supporting portion and a substrate pressing portion for supporting the substrate by sandwiching the substrate therebetween.

wherein the block supports the optical subassembly and substrate and defines relative positions of the lower casing and the upper casing.

19. (New) The optical module according to claim 18

wherein the block further includes a center wall and a pair of side walls disposing the center wall therebetween, the center wall providing the substrate supporting portion and each of the pair of side walls providing the substrate pressing portion.

20. (New) An optical module comprising:

a housing having a lower casing, an upper casing engage with the lower casing, and a cover for covering the upper casing, the lower casing integrally including a receptacle having a rear end part and a mount;

an optical subassembly optically coupled with an optical connector mated with the receptacle;

a substrate mounted on the mount of the lower casing and electrically connected to the optical subassembly; and

a block mounted on the lower casing and mounting the optical subassembly thereon, the block including a front wall abutting against the rear end part of the receptacle, the front wall having an opening and rear end part having an opening corresponding to the opening of the front wall,

wherein the optical subassembly is inserted into the opening of the front wall and into the opening of the receptacle.